

# QUANTA

QL USERS AND TINKERERS ASSOCIATION

Could this be the best container for the QL on a Pi?

Just another comment or is there a real issue here?

New software again, a jewel in the king with a crown!



2012

**AUG  
SEP**

*The Magazine*

*For all things QL related since 1984*

## Information on the Association

**Membership of QUANTA, the independent QL user group, is by annual subscription. The Membership Secretary can supply full details. Copies of the association's constitution & annual accounts are available from the Secretary. There is an extensive software library. There are active national subgroups. Details are given in the Member's Guide and in this magazine.**

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**COPY DATE for OCT NOV 2012 ISSUE is:**

**20<sup>th</sup> OCT 2012**

**Please ensure that your copy reaches the editor on or before that date. Copy on Paper or Magnetic Media or by Email.**

**All Contributions are Welcome.**

**Copy on Microdrive or Floppy Disk or CD to be accompanied by hard copy printout.**

**Copy by Email to - [editor@quanta.org.uk](mailto:editor@quanta.org.uk)**

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**J**ust in case it escaped anyone's notice, this year was Olympic year for the UK, and the UK won 29 Gold medals. Is it any coincidence then that QUANTA is in its 29th year. Those who believe in that sort of thing might just say yes and equally for others it will be a resounding poppycock response. Suffice to say I have included in this issue, a small program to celebrate the success of the 2012 Olympics.

I was lucky enough to get tickets to see the 'sit down volleyball' in the Paralympics events and although it was a most enjoyable and hot afternoon, you couldn't fail to be moved by the concentration of people with physical difficulties. Despite what life sometimes throws at us, determination and hard work will eventually reap rewards.

It has been a quiet few months on the QUANTA scene with very little to write home about. Dilwyn's NEWS column will however, always bring you all there is to know in the QL world. As ever any contributions are welcome, any projects you are working on we would like to hear about. Like the 'White Van' drivers advert you sometimes see 'No Job Too Small', we would state 'No contribution too small'.



If you have QL-related news items that you'd like us to include on this page, please get in touch with News Editor - Dilwyn Jones at [news@quanta.org.uk](mailto:news@quanta.org.uk)

### First Year Results

Geoff Wicks writes:

In its first year the new Just Words! website has had 4,159 visitors, although many of these were not QL-ers. The most popular page on the site was QL news followed by freeware downloads:

- 1: QL News (433 hits)
- 2: Freeware Downloads (385 hits)
- 3: Advice and Help (278 hits)
- 4: Maps (264 hits)
- 5: Dictionaries (227 hits)
- 6: QL maps (66 hits - launched half way through the year)

The top five Advice and Help articles were:

- 1: GD2 Colour Tutorial (93 hits)
- 2: User Friendly Programming (90 hits)
- 3: Transferring Spreadsheets (78 hits)
- 4: Transferring LineDesign pages to a PC (64 hits)
- 5: Compiling Dictionaries (59 hits)

Items 2 and 5 were among 4 articles republished on an eBook download site. The most popular freeware download by far was Roger Godley's GD2 version of Xchange:

- 1: GD2 Xchange (39 downloads)
- 2: Postcodes (19 downloads)
- 3: Solvit Plus 2 (19 downloads)
- 4: Style-Check (15 downloads)
- 5: Spelling Crib (12 downloads)

Where operating systems were known 81% of visitors used Windows, 10% Mac OS and 9% Linux. Mozilla (Firefox) was the most popular browser (62%) followed by Internet Explorer (18%).

### **Analogue Clock**

Tobias Fröschle has released an analogue clock program specially written for modern high colour QL compatible systems. It will only run on SMSQ/E systems.

The diagram below shows a few sample displays from the program, which is available to download free from the Utilities page at:

<http://www.dilwyn.me.uk/utills/index.html>

or direct from

<http://www.dilwyn.me.uk/utills/anaclock2.zip>



*Some sample displays from the Analogue Clock*

## **PCB Design Update**

Malcolm Lear has released yet another update to his PCB Design software, which is available to download from:

<http://www.dilwyn.me.uk/graphics/index.html>

This list of updates in version 7.24 is taken from the Revisions.Txt file in the package:

- Export menu tidied up and re-ordered.

- Grid step no longer wraps.

- Text sizes now change in 5 mil increments not 20 to match labels.

- Gerber import now reads pad and track sizes correctly if starting with decimal point.

# Q U A N T A



## Independent QL Users Group

World-wide Membership is by subscription only,

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**\*\*\* Now in our Twenty Ninth Year \*\*\***

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Email: [membership@quanta.org.uk](mailto:membership@quanta.org.uk)  
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Changes made to fully support old IEX format files.

Track and pad default sizes can be changed again.

Gerber import improved.

Annulus pads in Postscript export supported.

Pad size bug introduced in 7.21 removed.

Layer change as well as layer exchange.

'Solder resist for layer 5 pads' option no longer affects PDF export.

Improved PDF export colours.

### SETW Updates

George Gwilt writes:

A new version (7.09) of SETW is now on my site:

<http://gwiltprogs.info/>

This new version improves the appearance of \_asm output on the lines of suggestions made by Norman Dunbar in the latest QL Today.

Also SETW allows a user to present lists of text items, sprites, blobs and patterns by preset files rather than typing them in while SETW is running. This feature, which did not work on some

previous versions, is now again operational .

### **QJewels**

Be prepared to waste a lot of time on this one!

QJewels is a free new game for GD2 systems (e.g. QPC2), based on the popular Jewels genre.

QJewels is a colourful and (if you have the Sampled Sound System available from <http://www.dilwyn.me.uk/sound/index.html> installed on your system) noisy game. Arrange three or more jewels in a horizontal or vertical line to remove them and earn points - to move a jewel just drag and drop it one square away to form a line of three or more of those jewels.

Standard or compact screen display. "Hint" mode. Automatic "no more moves" display. Pointer driven program.

A screen dump is shown on the Games page on my website.

To be able to run this game you'll need a GD2 hi-res display system and SMSQ/E. Sampled Sound System optional - get sound accompaniment if you have that system. Most basic requirement - lots of time! If you're anything like me you'll waste a lot of time on this game, written for QL systems by Tobias Fröschle.

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Download it free of charge from:

<http://www.dilwyn.me.uk/games/index.html#qjewels>

(173 kilobyte download)



*QJewels display, with the larger screen size option*



*The end of a game in QJewels*

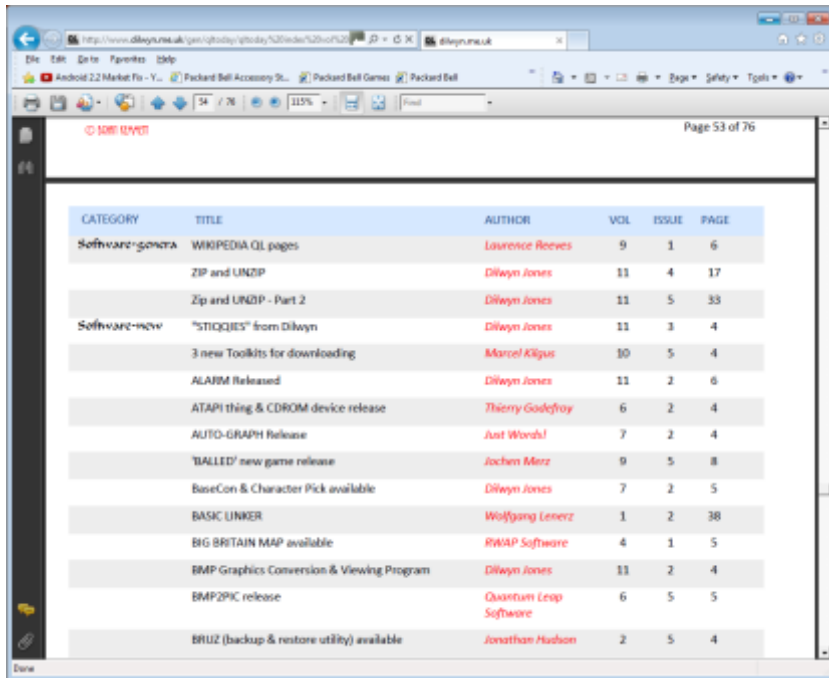


*The smaller screen display option*

## QL Today Index For Volume 16

Brian Kemmett has now updated the QL Today magazine index to include all of Volume 16 of the magazine.

The index is available to download free as a PDF file from my website at <http://www.dilwyn.me.uk/gen/qltoday/qltoday.html>



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*Sample display from the QL Today Index*

## Raspberry Pi QStripper

Norman Dunbar writes:

I suppose it really had to be done. Or did it?

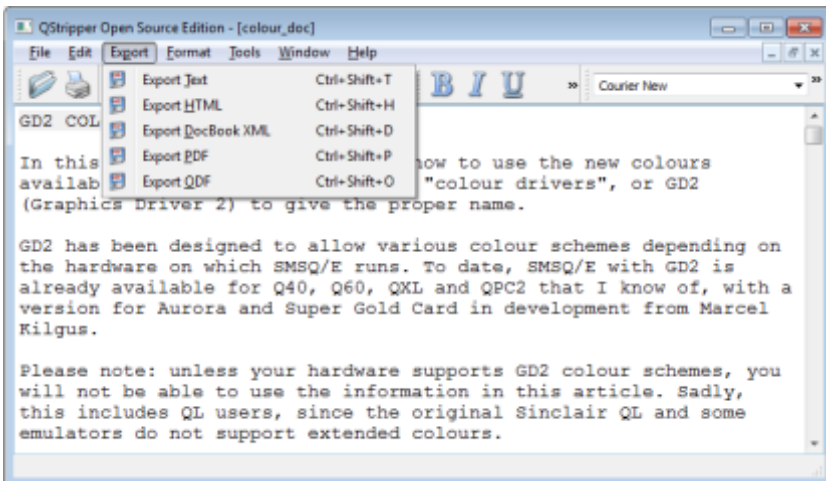
# QUANTA Magazine

Qstripper 1.07 is now available for Raspberry Pi! Unfortunately, it seems to suffer from the Linux 32 bit / Windows any bit Euro problem. (You can type one in, but for some reason, converting one appears not to work - for now!)

No changes to the source code required, just recompile on the Pi. Took a lot longer than I'm used to though! The joys of Qt!

Anyone got a spare Mac they might want to send me and I'll do a version for Mac as well? ;-)

QStripper is also now available for 32 bit Linux and the Raspberry Pi as well as Windows 32/64 bit and Linux 64bit.



<http://qstripper.sourceforge.net/#downloads>

## QL Emulator on Raspberry Pi

Tobias Fröschle has been busy porting a version of uQLx to run on Linux on the Raspberry Pi computer.

At the time of writing, early test versions had been issued to several people to try out and to beta-test.

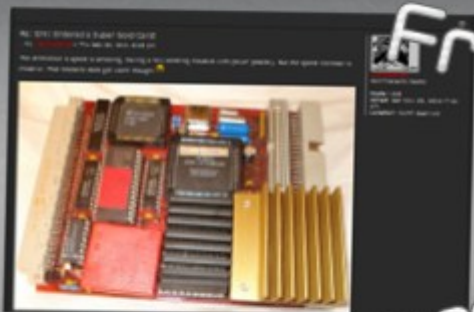
On the 5<sup>th</sup> August, Jon Dent wrote about his early experiences of trying it out:

“Tobias has done a great job. I can confirm that uqlx is working on the RPi. I ran Dilwyn's Unzip541\_bas program and could use resulting unzip executable.”

Norman Dunbar also wrote that there are currently some issues which arise with certain screen sizes in Mode 8 for example. Norman was also at pains to point out that since the Raspberry Pi uses an ARM processor, one thing which will definitely not be possible is to use the WINE software and QPC2. WINE is meant to allow Windows software (such as QPC2) to run on a Linux system, but this is not an option on an ARM processor at the moment.

Some RPi users have also been discussing the possibilities of using 3D printers to create mini cases for the RPi boards, possibly

# The online QL community



Free to join!

No registration needed to view



Please stop by for a visit!



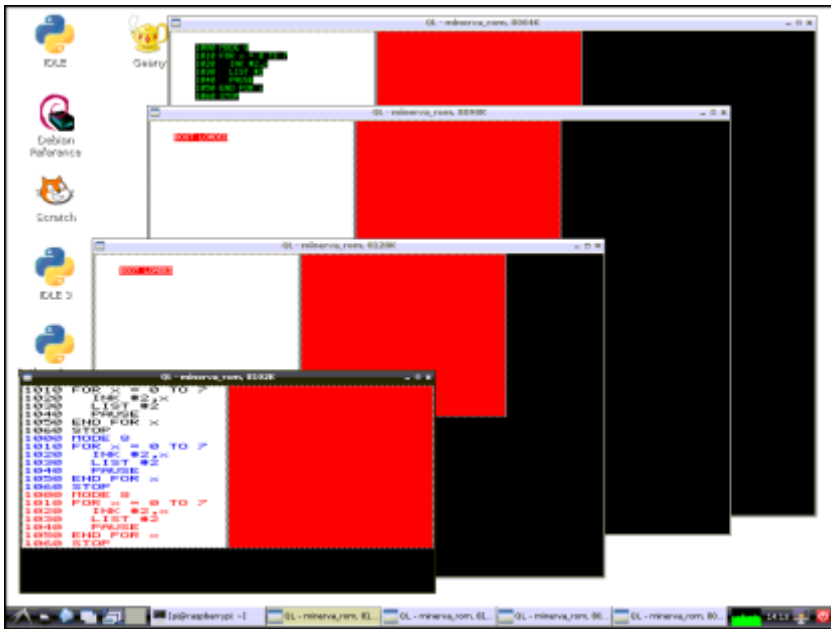
[www.qlforum.co.uk](http://www.qlforum.co.uk)

<http://www.qlforum.co.uk>



even miniature versions of a QL case so that a Raspberry Pi could have a black case resembling a QL or Tandata modem perhaps. More on this in a future issue perhaps if the idea progresses beyond discussion stage. (See this issues front cover—ed.)

I wasn't too impressed by our Editor's suggestion for a name, though – PiQL (pronounce "Pickle"? ) (I don't see a problem—ed.)



*Screen dump of uQLx on the Raspberry Pi showing all the possible combinations of qm (the smallest) and qx, qxx and finally qxx - in increasing order of size. Thanks to Norman Dunbar for this screen dump.*

(A call for any of our members to put together a guide to getting the QL on a Raspberry Pi would be gratefully received)

## SQRview Review – Feedback From The Author

I wrote a review of Bob Spelten jr.'s SQRview in the last issue. Bob has asked me to include the following:

“Thank you Dilwyn for the favorable review of my program in the last QUANTA.

It was interesting to see you used the Boulders image as a test subject. I used the "original" BMP (as supplied with your BMP program) a lot myself during testing. That one was 512x256 and a good candidate for stretching but it is also one of those images where there is little reference to what the right ratio would be. Your example shows that it should indeed be 4/3.

The Move option makes it a bit M\$-W\$-like and saves an extra loose item. The downside is that after working on this program for a long time, I was so used to dragging it around that I tend to do this with other programs with a filename in the top.

The "quirky" Esc/Load option has become second nature to me, also done this way in PhotoQL, but it's a good point to look at for a next update. My only excuse is that as it developed from an EP4-test into a real program, I avoided making new menu option if I

could solve it with existing items and simple Item\_Selects or double mouse (Hit/Do) functions.

The lack of pan/scroll for large sprites also needs further investigation for the update.

After analysing the header, the program could then automatically make a PIC, losing Alpha but that is most likely of more use in small sprites, and this should then also include RLE sprites (accessing the SMSQ/E routines or my next asm project?).

This may also be a problem on Aurora/SGC where you will sooner run out of memory as sprites with masks may be quite large. Wolfgang Lenerz's BMP2SPRT option uses the full 4 bytes per pixel in mode 64 for a normal mask, so SQRview will only save these with the Alpha or the Solid option.

The Bitmask you mention in your PNGCVT review eludes me. The examples I studied in detail suggest that one Word is used for each line, so it's only usable for a rectangle. Also the pto.mask is zero like a Solid mask so how does SMSQ/E know there is one? When RLE is used it's packed with the pattern and included in the length bytes.

I mentioned this on the QL-Users list some time ago, Marcel was surprised but never came back on this.”

#### MUST THE SHOW GO ON?

**I**t is becoming an annual QUANTA ritual. Following a disappointing attendance at the AGM workshop, QUANTA appeals for feedback from members about show venues and asks for ideas on how to increase interest. Feedback never comes.

This year there is feedback, but I suspect it is feedback that neither the committee nor members will enjoy reading.

The reality is that shows no longer interest the vast majority of QUANTA members. 80% have not attended a show in the last 5 years and 75% in the last ten years.

I am one of the exceptions. I estimate I have attended about three quarters of the QUANTA workshops that have been held in the last 15 years. I have attended them as a trader, as a committee member and as an ordinary member. I have given several

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presentations and on three occasions was responsible for the activity program, although one of these was a non-QUANTA event. I have also been present at 13 of the last 15 AGMs.

In 2000 QUANTA celebrated the new millennium by a prestige 2 day show in Portsmouth. There was much enthusiasm for the well attended event. But after 2000 QUANTA went quickly downhill. (Although smaller, QUANTA today is much stronger than it was ten years ago.)

Between 2000 and 2005 membership fell from just over 500 to under 250. There was a general attitude that QUANTA's days were limited and that it should be allowed to slowly fade away. There was an increasing reluctance for members to stand for office and existing committee members had to stay in office longer than they wanted. In his report to the 2003 AGM the then chairmen wrote:

"This year I was tempted to stand down as Chairman as was (the) Secretary for reasons primarily connected with work. We are both spending much more time out of the country (more than a dozen times last year for me)."

A year later the chairman did step down:

"This is primarily due to my considerable commitments, which involve and an ever increasing time being spent outside the UK."

It is fair to suggest that, for understandable reasons, QUANTA was near leaderless in 2002 and 2003.

The malaise soon spread to workshops. Attendance began to fall and frequently the first hour of a show saw no members present other than the traders, show organisers and their helpers.

Workshops were frequently held with no presentations or other activities. Shows were becoming increasingly uninteresting for QL-ers. One trader said there was no need for activities as "there is nothing new happening". In fact, there was a lot happening. The GD2 colours were being developed, but the work was taking place outside the UK and was largely bypassing the traders.

The sensible thing would have been for QUANTA and the traders to sit down together to discuss the future of workshops, but QUANTA was in no state to do this and the traders had their own agenda. In the "QUANTA power vacuum" they began to flex their muscles. In 2003 they insisted that QUANTA held its AGM on the day that most suited them even though this meant a breach of the constitution. QUANTA stupidly acquiesced. A year later, after

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QUANTA had announced and publicised the AGM date, the traders fixed a North American show just one week later and told QUANTA to change its AGM date. This time QUANTA refused to acquiesce.

In 2003 there was a discussion on the QL-users email group calling for an international workshop to celebrate the 20th anniversary of the QL in 2004. Unfortunately there was more talk than action in the UK and QUANTA showed no enthusiasm for running or even participating in the show. Eventually it was held in the Netherlands where the Dutch user group, Sin\_QL\_Air, were eager to host it. It was a highly successful show attracting most of the QL developers and experts, but which, because of its high technical content, made it less satisfactory for other QL-ers.



*Byfleet*

# QL Today

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The Magazine about QL, QDOS,  
Sinclair Computers, SMSQ...



*Issue 1 of the brandnew Volume  
17 will be on its way to the  
subscribers middle of September.  
52 pages, many interesting  
articles. This is how the cover  
will look! Still time to  
subscribe - online or offline!*

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I felt very strongly that QUANTA should organise a similar event to celebrate the 21st birthday of the QL. We needed a prestige event to determine whether shows still had the potential to interest members. I campaigned strongly for the event, and upset many people in doing so, but when QUANTA agreed to do it they put in a massive amount of money, time and effort to ensure its success.

The 2005 workshop, QLis21, did not capture the imagination of QUANTA members in the way that QL2000 had done. Attendance was reasonably good and there was a full program of activities to the extent that the traders felt neglected, but it was not seen as a national event. Rather than attend QLis21 the Surrey and London subgroups decided to hold a show of their own just a month before in Byfleet.



*Byfleet*

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The Byfleet show was poorly attended, as was another a year later. (The two photos were taken in the middle of the day when the workshop should have been at its busiest.) It was the last show held in Byfleet, and a year later Sussex subgroup decided to stop running the Portslade shows. There has been no QUANTA workshop south of the West Midlands for over five years, but I have heard no great clamour from the south that they are being neglected by QUANTA.

In 2009 QUANTA held another prestige event, QLis25, to celebrate the silver jubilee of both QUANTA and the QL. Once again QUANTA ploughed a lot of time, effort and money into making the workshop a success. In some ways it was. Attendance was about 75% higher than most AGM workshops and attendance at the AGM itself about 33% higher, but once again the show failed to capture the imagination of the members as a major QUANTA event. No London member attended and just 4 members from the South East although, based on my 2004 membership survey, probably about a quarter of QUANTA members live in these regions.

The message I picked up from QLis21, reinforced by QLis25, was that the days of the workshops were over. Shows were regarded as being local rather than national events and when local shows

## QUANTA Magazine

disappeared in the south no one seemed to miss them.

The disappearance of shows in the south has had a major financial effect on QUANTA. In the four years up to 2007 workshop and AGM costs were

2004 £1,201

2005 Qlis21

2006 £1,547

2007 £1,912

Compare that with the four years after 2007:

2008 £589

2009 Qlis25

2010 £447

2011 £100

The saving works out at over £1,000 per year and if QUANTA were to go back to a full workshop programme it would require a rise of £5 in the subscription to finance it.

The QUANTA AGM and workshop has now been held in Manchester for two consecutive years and this has upset some

members, but what is the alternative? Manchester is the only subgroup that has organised a show in the last five years. It has the cheapest of all show venues. Two years ago the committee experimented with a show in at a central location in Birmingham, but it was poorly attended - lower than the attendance if it had been held in Manchester. (I do not have a suitable photo, but if I had it would look very much like the Byfleet ones.) It is also difficult for the committee to organise a show outside their immediate area as they do not have the knowledge of local halls and other facilities. It would almost certainly mean booking an expensive venue in a hotel.

I am going to make a controversial suggestion. The committee should organise no workshops in 2013, but instead just hold an AGM. By default the AGM will be held once again in Manchester because that is the place where we can guarantee the largest attendance.

If members south of Birmingham, or elsewhere, do not agree with this it is for them to come with an alternative suggestion. It will be much easier for a subgroup or an individual to organise an AGM than a full blown workshop. You can use smaller halls and would not need to worry about difficulties over parking, loading and unloading or electric points. Catering would also be much simpler.

Ideally the hall should have two rooms so that the committee can meet in private and if you wanted to hold a presentation outside the AGM that could still be done.

There is, however, one big snag. The subgroup or individual would have to guarantee a minimum attendance of 10 local members to ensure that the AGM is quorate.

Who dares to take on the challenge?

*If have something to say or want to make a comment on this or any subject the email: [editor@quanta.org.uk](mailto:editor@quanta.org.uk)*

### **QUANTA HELPLINE**

**Dilwyn Jones**

**M**embers wishing to submit helpline requests via email can use the email address [helpline@quanta.org.uk](mailto:helpline@quanta.org.uk) or if you prefer to use traditional post, please send the helpline request to me via the address printed inside the front cover of the newsletter.

Obviously, we cannot guarantee to answer every query we receive, but we will do our best! Where we have been unable to answer the queries, we may print the help request as an open

request in the newsletter to ask if any of the readers can come up with a solution. And, of course, if readers feel that they have a better solution than we came up with, or would like to correct any errors we make, please write to us!

### **Add-on Interfaces**

Q. I recently returned to using a QL after many years. I bought an old disk interface which I think also has extra memory. Someone told me that it may also contain a copy of Toolkit 2. As is often the case with second hand hardware, it came without a manual so how can I tell what facilities it has?

A. This is something I am asked quite frequently. I have some replacement manuals for older interfaces and QL add-ons on my website's QL Documents page:

<http://www.dilwyn.me.uk/docs/index.html>

Scroll down to the link to the 'Replacement Manuals' page and click on the link.

Most interfaces (ones which have an on-board ROM - apart from memory add-ons) usually include a copyright notice on the start-up screen as the QL starts.

After that, the easiest way to check the type of an interface is to

# RWAP Software

We have been working hard to safeguard the future of the Sinclair QL through creating an online QL Wiki backed by a repository of QL titles.

The QL Wiki enables people to see what software and hardware was produced for the Sinclair QL. The repository enables people to purchase working copies when their microdrive cartridges fail, or they move onto disks or emulators. Where we can, we obtain permission from the copyright holders to re-release items on the market.

This has enabled us to bring some of the titles back to the market as well as re-ignite interest in the Sinclair QL and its emulators.

Old favourites brought back to life include:

- E.V.A., Vroom
- Black Knight, Double Block
- Jungle Eddi, The Lost Pharaoh
- Pengi, the Lonely Joker
- Microdeal's Flight Simulator, QL Hopper, The King,
- Night Nurse and Cuthbert in Space
- Mortville Manor, Darkside of the Moon (£10)

We still retain our existing catalogue, including:

- Open Golf, Return to Eden,
- Stone Raider II, The Prawn,
- Hoverzone, Lost Kingdom of Zkul,
- Deathstrike, Horrorday,
- Flightdeck and QWord

All games are available on disk or for use with Q-emulator on the PC **from ONLY £5 each**.

Microdrive versions also available - from £10 each.  
*Memory / system limits may apply - please check before ordering.*

Visit the QL Wiki for more details on software, books and hardware for the Sinclair QL:  
[www.rwapadventures.com/ql\\_wiki](http://www.rwapadventures.com/ql_wiki)

## RWAP Software

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Email: [rich@rwapsoftware.co.uk](mailto:rich@rwapsoftware.co.uk)

## Website:

[www.rwapsoftware.co.uk](http://www.rwapsoftware.co.uk) or [www.sellmyretro.com](http://www.sellmyretro.com)



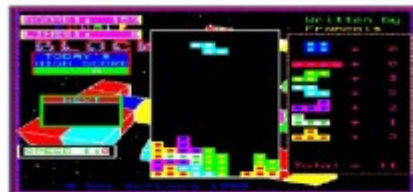
Vroom by Pyramide



E.V.A. by Westway



Mortville Manor by Pyramide



Double Block by Francois Lanciault



Night Nurse by Microdeal



have a look at the circuit board to see if the manufacturer included a description or copyright notice.

If that fails, compare the interface to photos on QL websites such as Rich Mellor's QL Wiki, which includes pictures of just about every QL interface ever released. The QL Wiki can be found at:

[http://www.rwapadventures.com/ql\\_wiki/](http://www.rwapadventures.com/ql_wiki/)

Regarding memory, if it is not obvious from the chips you can see on the circuit board, most interfaces have a command (well, a function actually) which tells you the amount of free memory on your system. Type in the command `PRINT FREE_MEM` and it will print a number indicating how much free memory is available. The command is not implemented on an unexpanded QL.

As it is the amount of **free** memory, it is best used immediately after turning on the QL. The QL screen will always use at least 32768 bytes, so an unexpanded QL there would never be more than 98304 bytes, although on an unexpanded memory QL it will in practice be even less than this because of memory used for system variables and other operating system information.

If you get a result of more than 128kilobytes (131072 bytes) it will indicate that there is an expanded memory fitted to the computer,

although it may be a little hard to figure out exactly how much as the number of free bytes is less than might be expected because of memory used for the screen and system variables, for example.

Most older disc interfaces with on-board memory expansions have 128K, 256K, or 512K memory on-board. Usually, this is in addition to the QL's built in memory, so the QL will have the following amounts of RAM in practice:

128KB extra: 262,144 bytes (256KB total)

256KB extra: 393,216 bytes (384KB total)

512KB extra: 655,360 bytes (640KB total)

Internal 512K expansion RAM: 524,288 bytes (512K total)

So whatever figure is returned by PRINT FREE\_MEM, from the closest figure above you may be able to work out how much memory the system has in total.

For systems which do not have a FREE\_MEM function built in, a rather more long-winded method is needed, involving some PEEK\_L commands. This is not recommended except where this no other better method available, but may work on unexpanded QLs and QLs with older add-on cards.

```
PRINT PEEK_L(163840+32) - 131072
```

This command checks the system variable 32 which keeps a note of the top address of RAM. From this you have to deduct where RAM starts, which on a QL is at address decimal 131072. This returns the number of bytes on a QL system and you have to divide this by 1024 to get the number of kilobytes.

In the case of a 128K memory QL, this will return 131072 bytes (which just happens to be the same as where the screen starts on an original Sinclair QL).

Note that this is not a reliable method on modern systems, although on older systems it is good enough to give you a quick idea of how much memory the system contains.

When the QL was first launched, its design was fixed and documented. Fixed areas in the address range were to be used for RAM, and this only allowed for up to 512KB of extra RAM to be added to the built in 128K of RAM, making a theoretical maximum of 640KB of RAM. Then along came the Trump Card and smashed those rules, adding enough memory to make a total maximum of 896KB. It did this by adding RAM in address spaces reserved for additional interfaces. This did mean that once you had added a Trump Card to use those memory locations for extra RAM, you could no longer add any further devices in a “legitimate” manner (i.e. conforming to Sinclair documentation), even if you did have a 2, 3 or 4 slot expansion backplane.

## QUANTA Magazine

Moving on to extensions now, most floppy disc systems have at least a part if not most of the Toolkit 2 extensions along with the extensions to BASIC associated with whatever make of disc system it is. Entering the command EXTRAS on most disc systems will list the names of all the extensions to BASIC added by the disc interface ROM.

The list is not usually in alphabetical order. In fact, if you want to be adventurous you can send the output of the EXTRAS command to a file and read it back to sort it. Or, you can read through the list to see if your system has a particular extension. Here's an example.

```
100 REMark check if extension name exists
110 CLS : CLS #0
120 INPUT #0,'Check for which extension name >
';search$
130 OPEN_NEW #3,FLP1_TEMP_FILE
140 EXTRAS #3
150 CLOSE #3
160 OPEN_IN #3,FLP1_TEMP_FILE
170 INPUT #3,t$ : REMark skip the medium name
180 INPUT #3,t$ : REMark skip the medium capacity
numbers
190 found% = 0
200 REPEAT loop
```

## QUANTA Magazine

```
210  IF EOF(#3) THEN EXIT loop
220  INPUT #3,t$ : REMark get one line of EXTRAS
output
230  IF t$ == search$ THEN found% = 1 : EXIT
loop
240  END REPEAT loop
250  CLOSE #3
260  DELETE FLP1_TEMP_FILE : REMark get rid of the
evidence!
270  PRINT search$;' ';
280  IF found% = 1 THEN
290    PRINT'exists'
300  ELSE
310    PRINT'does not exist'
320  END IF
```

Some disc interfaces include a Toolkit 2 or subset of it, but need a command to activate it when you first switch on the QL. The command needed to activate the toolkit is usually TK2\_EXT.

The above information will hopefully help you to identify the basic facilities of an older interface. More modern systems such as Gold Card and Super Gold Card (and to some extent Trump Cards) may vary somewhat. At least, replacement manuals are readily available for them.

Q. Many years ago I had a QL which I enjoyed using at the time, but eventually moved on to other computer systems. I still have that QL and in a fit of nostalgia (or was that boredom?) recently I dug it out of my attic where it had been stored for over a decade. Upon plugging it in, I was delighted to find it still worked, and amazingly several of the microdrive tapes still worked too. I spent a weekend rediscovering my QL, even though I'd forgotten 99% of what I once knew about the computer. Do you have any suggestions for reading material which would help me get back up to speed on the QL – it makes a refreshing change from the computers I use at work.

## RWAP Software

### Replacement QL Keyboard Membranes

Special Offer for Quanta Members  
£12 each plus post and packing

Quote "Quanta 2012 Offer"

Post and packing:  
UK £2.50  
Europe £2.80  
Rest of World £3

Visit the QL Wiki for more details on software, books and hardware for the Sinclair QL:  
[www.rwapadventures.com/ql\\_wiki](http://www.rwapadventures.com/ql_wiki)

RWAP Software  
3 Dale View Court, Fulford, Stoke-on-Trent  
Staffordshire ST11 9BA  
Tel: 01782 398143  
Email: [rich@rwapservices.co.uk](mailto:rich@rwapservices.co.uk)

UK Cheques payable to 'R. Mellor' or use PayPal.

Website:  
[www.rwapsoftware.co.uk](http://www.rwapsoftware.co.uk) or [www.sellmyretro.com](http://www.sellmyretro.com)



Why a bad keyboard membrane could change your whole career strategy!

Working to safeguard the QL for the future. [www.rwapsoftware.co.uk](http://www.rwapsoftware.co.uk)

A. This query I got recently from a non-member seems to be getting more and more common. It suggests that there are quite a few users out there who find that returning to using a QL is surprisingly common. I also get such requests from retro-computing enthusiasts for whom a QL is one of many vintage computers in their collections, and even the odd new user who has acquired a second-hand QL. I would have hoped that someone has ideas on how to reach these sorts of new and returning users who may otherwise exist in isolation, not knowing that there is still a fairly small yet active community of QL users. Our Editor is one such person who has returned to using a QL after several years, after all.

So I'll start by suggesting our Editor's work. It seems quite natural that as he is a fairly recent returnee to the QL scene, he might want to share his experiences with other such QL users.

So a first port of call might be his website, where he has a section called "I Want 2 Learn". The website is at <http://www.theql.co.uk/> and the "I Want 2 Learn" section is reached by clicking on the link on the right , below the, errr, colourful heading (helpfully the link is also called "I Want 2 Learn" !)

Referring back to the last issue of QUANTA magazine, on page

43, Lee has also released an eBook for those who are new to or returning to the QL. Under the heading “A New Book In Town” he describes his book called “Back 2 the QL” which is available free on iTunes for reading on an iPad. Download it free from:

<http://itunes.apple.com/us/book/back-2-the-ql/id535174158?ls=1>

or search for ‘Back 2 The QL’

Websites like this show just how useful modern technology can be for sharing information about retro-computers like the QL. It is hardly surprising that most of the modern sources of QL information come from websites.

Rich Mellor at RWAP Software operates a wonderful site called the QL Wiki. As the name implies, this site is a ‘wiki’ or a type of online encyclopaedia which anyone can update to amend or supplement the extensive information already there. You need to register to be able to edit it (stops spammers playing havoc with the site) but anyone can read the pages.

The QL Wiki includes extensive information on books, CD-ROMs, QL systems, add-ons, software and so on. It is not purely a beginner’s guide to the QL but whether you need to find information about books or software, or identify an old QL interface through pictures, it is a great help. And as your experience grows if you acquire something for the QL which is not already described



there you can register to be able to add to the information. The QL Wiki website is at:

[http://www.rwapadventures.com/ql\\_wiki/](http://www.rwapadventures.com/ql_wiki/)

Having familiarised yourself with what types of add-ons, books and software are available, you will next want to know where you can get these from. Modern auction sites like eBay ([www.ebay.co.uk](http://www.ebay.co.uk)) and SellMyRetro ([www.sellmyretro.com](http://www.sellmyretro.com)) are a great source of second-hand products for the QL, such as disk and memory add-ons. Most auction sites like these will let you buy stuff using a credit or debit card, or the PayPal payment system if you have signed up to that. Be prepared with the larger auction sites to spend some time searching and comparing products. Some have facilities for you to register an interest in certain products and will send you an email when an item they think is suitable becomes available. Prices vary quite a lot, since you have to 'bid' for these and obviously the highest bidder usually gets to buy the item. Sometimes, you may find that you can either bid for an item or buy it at a fixed price.

My website has a page called 'Returning To The QL' designed to help get "returnees" going. It consists of a series of frequently asked questions and answers (FAQs) together with a set of links to useful pages elsewhere on my website:

<http://www.dilwyn.me.uk/gen/backtoql/backtoql.html>

## QUANTA Magazine

Although some of the material on my Documentation pages can be heavy going for someone new or returning to the QL, if you are prepared to search through the various sections you will be able to find many useful books and articles there, including a copy of the QL User Guide if you have no original Sinclair manual for your QL. The manual can be downloaded or read online. There's also a whole section devoted to eBooks, designed to be used with eBook readers such as Amazon Kindles. My QL Documentation pages can be found at <http://www.dilwyn.me.uk/docs/index.html>

If you are new to the QL scene and would like to find general and background information about the QL, try my 'About The QL' pages at <http://www.dilwyn.me.uk/gen/aboutql/aboutql.html> . You can find a lot of the history of the QL computer both here and also on Chris Owen's Planet Sinclair site at <http://www.nvg.ntnu.no/sinclair/> . Planet Sinclair is not just about the QL – although it has a section dedicated to the QL - it contains a lot of information on many Sinclair products.

QL Today magazine has recently been publishing a series of 'Glossary' articles, which seek to explain what certain abbreviations and acronyms mean. When you haven't used a QL for some years, running into an abbreviation like SGC can be intimidating when you don't know what they mean. SGC stands for Super Gold Card, by the way, a QL add-on board which adds a floppy disk interface, up

## QUANTA Magazine

to 4MB of memory, Toolkit 2 software and a faster processor which greatly increases the speed of a standard QL. If you have missed these articles, you can catch up with the Glossary articles via my website at <http://www.dilwyn.me.uk/docs/glossary/index.html> . If you would like to subscribe to QL Today magazine, you can find information about the magazine via its website at:

<http://www.qltoday.com/> . QL Today advertises in QUANTA magazine regularly.

QL Today Editor, Geoff Wicks, is a former QL software publisher and now operates a website with plenty of help and advice plus several programs you can download free of charge.

<http://www.gwicks.net/justwords.html> is the address of the website.

On the Help/Advice page you can find excellent articles and advice on programming the new higher colour QL compatible systems, user friendly programming, transferring files and so on.

Having mentioned websites and transferring files reminds me that one of the problems new users often run into is that of transferring files between different computers. In this internet age, many of us have PCs running Windows, Apple Macs and Linux systems and it can be quite a challenge at first working out how to copy and move files between these computers and a QL. Software downloaded from QL-related websites is usually in 'Zip' file format, for example, so you will need to know how to get these files from a PC to a QL

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perhaps, where to get hold of copies of the Zip and Unzip programs for a QL and how to use them. There is an introductory article on my website which discusses how best to use the Unzip and related programs for transferring files from one computer to another. Have a look at the article at:

<http://www.dilwyn.me.uk/gen/pcq1xfer/index.html> . A second method of transferring files between computers is to use a serial cable link if the computers concerned have these – try the article about this at <http://www.dilwyn.me.uk/gen/serial/serial.html>

If you would like to contact other QL users worldwide, there are two UK-based forums. One operates via email – someone sends an email to the list and it is copied to all subscribers. It's called the QL-Users list and you can find information about it from Bruce Nicholls's website at:

<http://lists.q-v-d.com/listinfo.cgi/ql-users-q-v-d.com> . A second forum, called simply QL Forum, operates more like a traditional computer forum – have a look at [www.qlforum.co.uk](http://www.qlforum.co.uk) . In both cases, if you need help, just ask on these forums (you have to subscribe to be able to join, subscription to both is free). There's always plenty of experienced members who can answer pretty well anything between them.

Many of these websites I have mentioned contain links to other QL-related websites. Some have free QL software to download.

(continued on page 49...)

## **SUBGROUP MEETINGS**

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**S**ub group meetings are where QUANTA members and non-QUANTA members get together to discuss, tinker and explore all things QL related. If there is a subgroup near you then why not pop along and see what's happening, you never know there may be something you could help with or a problem that you know the answer to. If there is not a sub-group near you why not hold one yourself? (Ed.)

---

### **THE WEST MIDLANDS QL USER GROUP**

**T**he meeting place is called the Bull, the address is 1 Price Street, Birmingham, B4 6JU. It is approximately 7 minutes walk from Snow Hill main-line railway station and has ample street parking nearby. Meetings remain open to QUANTA members and non-members alike.

After your first meeting you're expected to pay £1 each time towards the organisation and monthly newsletter costs - except once a year when the group pays all those who attend a pound instead

We provide food twice a year for those who attend the AGM and the group's birthday party) and at meetings we discuss all sorts of things, QL-related and otherwise, usually from about 8:20pm onwards till 10:30 or later. The group owns QL hardware, a disk library and subscribes to relevant magazines. People can join the mailing list for £3.50 per year, even if they can't attend regularly.

Meetings: Meetings are usually on the first and third Monday of each month (but not on bank holidays unless the previous one was cancelled for that reason). Contact: The contact number remains Mike Bedford White's, on 0121 605 4438, anytime after 11am.

[Email: mikebwhite@blueyonder.co.uk](mailto:mikebwhite@blueyonder.co.uk)

## QUANTA DORSET SUBGROUP – Dorset

**M**eetings are held, on the second Sunday of each month between 2.00pm and 5.00pm. For location please contact:  
John Penn-Simkins - 01202 422491 or John Mason - 01425 275894

## LONDON QL AND QUANTA GROUP

**M**eetings are held in the School Room, which is the basement of the Borough Welsh Congregational Chapel, 90, Southwark Bridge Road, London SE1. This is almost opposite the junction with Marshalsea Road, at the other end of which, 5 minutes walk away, is the Borough Underground Station. Free parking is easily available in Southwark Bridge Road for road users, Cyclists are welcome. Members currently each pay a subscription of £40 per year towards the cost of the hire of the hall and a small additional charge is made for tea/coffee - biscuits are then provided free.

Please bring your QL equipment if possible, all types welcome, e.g., PC portable running emulators. The Group has some systems stored at the venue for its use. In addition, there are lots of donated second user equipment, books, magazines, etc., available for purchase. Time: 2.00 pm. to 5.00 pm., on the second Sunday of the month. No meetings are held in December / January - winter break, or July / August –the summer break, giving 8 meetings a year. Malcolm Cadman - 020 8691 5780  
[Email: QL@mcad.demon.co.uk](mailto:QL@mcad.demon.co.uk)

## NEMQLUG - THE NORTH EAST MANCHESTER QL USER GROUP

**M**eetings are held at 181, Urmston Lane, Stretford, Manchester. M32 9EH (Near Junction 7 of M60 Motorway)

Was Junction 7 M63 Motorway). Our informal meetings start at 7 p.m. and finish at 11 pm. All welcome. Meetings are on the last Thursday of each month (except December). John/Sarah Gilpin – 0161 865 2872 ([thegilpins@btinternet.com](mailto:thegilpins@btinternet.com))

### SCOTTISH QL USERS GROUP

**S** QLUG meets at George Gwilt's home every second Sunday in the month. Please contact George Gwilt before coming, to get the location. [Gdgqler@gmail.com](mailto:Gdgqler@gmail.com)

### SOLENT SUBGROUP

**M** eetings are at Botley Market Hall, all welcome. Park at the back and use side entrance on the 1st Saturday of the month from 2.00 pm to 6.00 pm. Graham Evans - 023 8040 3350.

### SURREY QUANTA SUBGROUP (SQSG)

**T** he group is currently trying other venues in the Leatherhead - Epsom area. If you plan to attend but do not get our emails, please phone or email Ken Bain for the latest location. Meetings are 8.00 to 10.00 pm on the last Wednesday of each month except December. Ken Bain - 01932 347432 (to midnight), [kenb@bcs.org.uk](mailto:kenb@bcs.org.uk)

### SUSSEX QL USER GROUP

**C** urrently without a meeting place, anyone interested should contact Roy Wood - 01273 430501 or Keith Mitchell - 01903 742263.

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**Welcome**

Quo Vadis Design sells software for the Sinclair Quantum Leap computer (QL) and variants including a new OS called SMSQ/E.

The QL is a computer in its 25th year Anniversary.



Software emulations of the QL now exist which can run on a PC/Mac with Windows/Linux or Mac Operating systems.

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Check the QL News Blog on  
our website for updates.

www.ql-qvd.com/blog



Subscriptions taken online



...(continued from page 44)

My website contains a link to many such QL-related websites – have a look at <http://www.dilwyn.me.uk/gen/qlnet/qlnet.html> .

While having a list of some useful sources of information is one thing, finding specialist material can be tricky. This is where a little dedicated QL search engine comes in. This is at the top of the home page of my QL website at [www.dilwyn.me.uk](http://www.dilwyn.me.uk) .It is optimised to find results related to QL systems.

## FLAG

Lee Privett

**W**ith the Olympics and Paralympics now becoming a distant memory, I set my mind to a number of projects and like most things, I drift in to focussing on one particular thing. This time it



## QUANTA Magazine

was the Union Jack flag and can I get it displayed/drawn on the QL. The result you can see in the screen shots and how it was achieved in the listing. The biggest bugbear for me was the accuracy and measurements due to that ever present SCALE command not doing exactly what I want to do. I am fairly pleased with the results however and constructed the flag in sections so it was possible to remark some lines out to realise the Scottish flag.

There are a number of short letter variables with the idea that sometime in the future the whole thing would be scalable. In the end the result is not exactly perfect but it suited my needs for an Olympic style program I am working on.



If you can suggest some modifications or improve on the program then please do and send it in to QUANTA.

# QUANTA Magazine

```
100 REMark =====
110 REMark Lee Privett 2012 August
120 REMark UK Flag - Back to the QL
130 REMark =====
140 :
150 SetUpScreens
160 UKFlag
170 :
180 DEFine PROCedure UKFlag
190   PAPER white:INK white:CLS
200   REMark =====
210   REMark Basic Background Setup
220   REMark blue background
230   REMark =====
240   BLOCK 500,190,5,5,1 :REMark Blue
250 :
260 REMark Local Variables
270 g=40:l=377.5
280 lc=1/2
290 hc=(YM/2)-1.5
300 gg=24
310 Be=3:Bee=Be+5
320 LHS=4:RHS=1
330 :
340 REMark =====
```

# QUANTA Magazine

350 REMark Use this next part to replace  
360 REMark the white cross above for the  
370 REMark Scottish flag  
380 REMark =====  
390 INK white  
400 FILL 1:REMark White CROSS  
410 LINE LHS,195 TO LHS+g,195 TO l,gg TO l,Be TO l-  
g,Be TO LHS,195-gg TO LHS,195  
420 FILL 0  
430 FILL 1  
440 LINE LHS,Be TO LHS,gg TO l-g-2,195 TO l,195 TO  
l,195-gg TO LHS+g,Be TO LHS,Be  
450 FILL 0  
460 INK red  
470 :  
480 Pad=28:Top=196  
490 DI=17 :Pid=16  
500 :  
510 FILL 1  
520 REMark Red Top Left  
530 LINE LHS,Top TO lc,hc TO lc-Pad,hc TO LHS,Top-DI  
TO LHS,Top  
540 FILL 0  
550 FILL 1  
560 REMark Red Bottom Left  
570 LINE LHS,Be TO lc,hc TO lc,hc-Pid TO Pad,Be TO

# QUANTA Magazine

```
LHS,Be
580 FILL 0
590 FILL 1
600 REMark Red Cross Bottom Right
610 LINE RHS,Be TO lc,hc TO lc+Pad,hc TO RHS,Pid
TO RHS,Be
620 FILL 0
630 FILL 1
640 REMark Red Cross Top Right
650 LINE RHS,Top TO lc,hc TO lc,hc+Pid TO RHS-
Pad,Top TO RHS,Top
660 FILL 0
670 BLOCK 500,60,5,70,white :REMark White Hor
680 BLOCK 80,190,214,5,white :REMark White Ver
690 BLOCK 500,40,5,80,red :REMark Red Hor
Cross
700 BLOCK 53,190,228,5,red :REMark Red Ver
Cross
710 END DEFine
720 :
730 DEFine PROCedure SetUpScreens
732 REMark =====
735 REMark Set default values to standard
737 REMark screen size and variable to
739 REMark colour names
740 REMark =====
```

## QUANTA Magazine

```
745  MODE 8           :REMark Set number of colours
750  XM=512          :REMark maximum of the screen X
760  YM=200          :REMark maximum of the screen Y
770  XC=XM/2         :REMark centre of the screen X
780  YC=YM/2         :REMark centre of the screen Y
790  Black   =0
800  blue    =1
810  red     =2
820  Magenta=3
830  green   =4
840  Cyan    =5
850  Yellow  =6
860  white   =7
870  WINDOW#2,XM,YM,0,0 :REMark Editing
880  WINDOW#1,XM,YM,0,0 :REMark Display
890  WINDOW#0,XM,56,0,YM :REMark Input
900
BORDER#2,1,white :CSIZE#2,0,0:PAPER#2,white:INK#2,red:
CLS#2
910
BORDER#1,1,white :CSIZE#1,0,0:PAPER#1,red:INK#1,white
:CLS#1
920
BORDER#0,1,white :CSIZE#0,0,0 :PAPER#0,Black :INK#0,gr
een :CLS#0
930  SCALE YM,0,0
940  END DEFine
```

```
950 :  
960 :  
970 DEFine PROCedure S  
980 REMark =====  
990 REMark Save file  
1000 REMark =====  
1010 SAVE WIN1_FLAG  
1020 END DEFine
```

**FINALLY**

**Lee Privett**

---

## MICROVITEC MONITOR SERVICE MANUAL

**T**hanks to Norman Dunbar, I have now been able to add a copy of the Microvitec Service Manual for their series-3 colour monitors to the replacement manuals page on my website.

The document is a PDF file, 83 pages long and about three quarters of a megabyte to download, from :  
<http://www.dilwyn.me.uk/docs/manuals/index.html> – on that page go down to the Monitor Manuals section (about halfway down the page) and you'll find the link just under that for the replacement Cub monitor manual.

Most older disc interfaces with onboard  
memory 128K, 256K, or  
memory, this is in addit  
the QL's b so the QL will h  
the follow RAM in practice  
128KB total  
256KB total  
512KB total  
Internat 524,288 b  
(512K to  
S  
F  
I



**I WANT YOU FOR A  
QUANTA ARTICLE**